



REGISTERED DATA SHEET PERFORATING SYSTEM EVALUATION, API RP 19B SECTION 1

Service Company Available to all Design Number _____ Explosive Weight 39 gm, HMX powder, Case Material Steel
 Gun OD & Trade Name 7" High Shot Density Gun DP HMX Max. Temp. °F 400 1 hr _____ 3 hr _____ 24 hr _____ 100 hr _____ 200 hr
 Charge Name 39gms HMX Barracuda DP (DSC 06-02-35) Maximum Pressure Rating 13.000 psi, Carrier Material Steel
 Manufacturer Charge Part No. TC47HP Date of Manufacture Feb 21st 2006 Shot Density Tested _____ 12 _____ Shots/ft
 Gun Type High Shot Density Gun. 12 SPF 135° Recommended Minimum ID for Running _____ * _____ in.
 Phasing Tested 135° degrees, Firing Order X Top Down, _____ Bottom Up Available Firing Mode _____ X _____ Selective, _____ X _____ Simultaneous
 Debris Description N/A Debris Weight _____ N/A _____ gm/charge, Debris _____ N/A _____ in³/charge
 Remarks * Gun OD after shooting in liquid 7.15In.

SECTION 1 - CONCRETE TARGET

Casing Data 9 5/8" OD, Weight 47 lb/ft, L-80 API Grade, Date of Section 1 Test June 05th 2006
 Target Data 110" OD, Amount of Cement 14040 lb., Amount of Sand 28080 lb., Amount of Water 7300 lb.
 Date of Compressive Strength Test June 06th 2006, Briquette Compressive Strength 6883 psi, Age of Target 35 days

Shot No.	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8	No. 9	No. 10	No. 11
Clearance, in.	0.000	1.394	0.758	0.205	1.681	0.205	0.758	1.394	0.000	1.394	0.758
Casing Hole Diameter, Short Axis, in.	0.460	0.440	0.440	0.450	0.440	0.440	0.450	0.450	0.430	0.450	0.460
Casing Hole Diameter, Long Axis, in.	0.480	0.450	0.450	0.450	0.480	0.450	0.470	0.480	0.440	0.480	0.470
Average Casing Hole Diameter, in.	0.460	0.445	0.445	0.450	0.460	0.445	0.460	0.465	0.435	0.465	0.465
Total Depth, in.	46.220	49.470	44.970	43.470	47.970	46.470	50.470	45.470	46.470	45.470	48.470
Burr Height, in.	0.085	0.043	0.044	0.036	0.043	0.053	0.051	0.033	0.023	0.051	0.037

Shot No.	No. 12	No. 13	No. 14	No. 15	No. 16	No. 17	No. 18	No. 19	No. 20	No. 21	No. 22	Average
Clearance, in.	0.205	1.681	0.205	0.758	1.394	0.000	1.394	0.758	0.205	1.681		0.801
Casing Hole Diameter, Short Axis, in.	0.480	0.450	0.400	0.420	0.430	0.460	0.470	0.440	0.450	0.480		0.446
Casing Hole Diameter, Long Axis, in.	0.480	0.470	0.430	0.430	0.440	0.480	0.470	0.460	0.480	0.480		0.461
Average Casing Hole Diameter, in.	0.480	0.460	0.415	0.425	0.435	0.470	0.470	0.450	0.465	0.480		0.454
Total Depth, in.	46.220	47.720	45.470	49.720	43.470	47.220	47.470	43.970	46.470	44.470		46.672
Burr Height, in.	0.039	0.067	0.032	0.060	0.052	0.038	0.035	0.020	0.042	0.051		0.044

WITNESSING INFORMATION

Date of Notice of Intent to Test: May 2nd 2006 Witnessed by: J. Smirnov J. Smirnov (API Certified)

Other Activities Witnessed: Target Pouring _____ Briquette: Preparation _____ Testing X Burr Height Measurement X Samples Taken: Concrete X Casing X

CERTIFICATION

I certify that these tests were made according to the procedures as outlined in API RP 19B: Recommended Practices for Evaluation of Well Perforators, First Edition, November 2000. All of the equipment used in these tests, such as the guns, jet charges detonator cord, etc., was standard equipment with our company for the use in the gun being tested and was not changed in any manner for the test. Furthermore, the equipment was chosen at random from stock and therefore will be substantially the same as the equipment, which would be furnished to perforate a well for any operator. The American Petroleum Institute neither endorses these test results nor recommends the use of the perforator system described.

X CERTIFIED BY _____ Perforating Projects Manager June 08th 2006 Explosivos Tecnologicos Argentinos S.A. Ruta 25Km.13 Pilar- Bs.As. Argentina
 _____ RECERTIFIED _____ Company Official) (Title) (Date) (Company) (Address)